List of Contents

NUMBER 1

i Softstrip® data strip containing the table of contents of this issue

LeRoy F. Simmons and **Laurette Poulos** 1 DSS: the successful implementation of a mathematical programming model for strategic planning

Vernon Rego 7 Characterizations of equilibrium queue length distributions in M/GI/1 queues

Andrew Reibman and **Kishor Trivedi** 19 Numerical transient analysis of Markov models

R. Armstrong, A. Charnes and **C. Haksever** 37 Implementation of successive linear programming algorithms for non-convex goal programming

Konstantinos P. Triantis and **Csaba J. Egyhazy** 51 An integer programming formulation embedded in an algorithm for query processing optimization in distributed relational database systems

Rajan Batta and **Udatta S. Palekar** 61 Mixed planar/network facility location problems

Hanif D. Sherali and **Allen L. Soyster** 69 Convergence analysis and algorithmic implications of two dynamic processes toward an oligopoly-competitive fringe equilibrium solution

R. K. Ahuja 83 Minimum cost-reliability ratio path problem

NUMBER 2

i Softstrip® data strip containing the table of contents of this issue

T. C. E. Cheng 91 Optimal common due-date with limited completion time deviation

Sang M. Lee and **Richard L. Luebbe** 97 A comparison of a constraint aggregation and partitioning zero-one goal programming algorithm with the Lee and Morris algorithm

Rex K. Kincaid, Timothy J. Lowe and **Thomas L. Morin** 103 The location of central structures in trees

Francis J. Vasko and **Floyd E. Wolf** 115 Solving large set covering problems on a personal computer

Jacob W. Ulvila and **Bryan B. Thompson** 123 A computerized risk analysis aid

Wade D. Cook, Igal Golan and **Moshe Kress** 135 Heuristics for ranking players in a round robin tournament

Mufit Ozden 145 A solution procedure for general knapsack problems with a few constraints

Laoucine Kerbache and **J. MacGregor Smith** 157 Asymptotic behavior of the expansion method for open finite queueing networks

Nicholas G. Hall, **Soumen Ghosh**, **Roland D. Kankey**, **Sridhar Narasimhan** and **WanSoo T. Rhee** 171 Bin packing problems in one dimension: heuristic solutions and confidence intervals

R. K. Arora and **R. K. Sachdeva** 179 Distributed simulation of activity networks

Rasaratnam Logendran and **M. Palmer Terrell** 189 Uncapacitated plant location–allocation problems with price sensitive stochastic demands

NUMBER 3

i Softstrip® data strip containing the table of contents of this issue

R. A. Wattenbarger, **R. A. Startzman** and **R. J. Gajdica** 199 Estimating gas-in-place in aquifer-driven reservoirs

Kathleen A. Woolston and **Susan L. Albin** 207 The design of centralized networks with reliability and availability constraints

Jacques Desrosiers, **Gilbert Laporte**, **Michel Sauvé**, **François Soumis** and **Serge Taillefer** 219 Vehicle routing with full loads

Layek L. Abdel-Malek and **Hans Ziegler** 227 Age dependent perishability in two-echelon serial inventory systems

I. Douglas Moon 239 On eliminating vertices from a tree

Hokey Min 243 The dynamic expansion and relocation of capacitated public facilities: a multi-objective approach

Rajan Batta and **Lloyd A. Leifer** 253 On the accuracy of demand point solutions to the planar, Manhattan metric, p-median problem, with and without barriers to travel

Amiya K. Chakravarty and **G. E. Martin** 263 Optimal multi-product inventory grouping for co-ordinated periodic replenishment under stochastic demand

Amiya K. Chakravarty and **G. E. Martin** 271 An optimal joint buyer–seller discount pricing model

G. Brière and **M. L. Chaudhry** 283 Computational analysis of single-server bulk-arrival queues $M^X/G/1$

Joti L. Jain and **Winfried K. Grassmann** 293 Numerical solution for the departure process from the GI/G/1 queue

Note

Wilfred Candler 297 A linear bilevel programming algorithm: a comment

I *Corrigendum*

NUMBER 4

i Softstrip® data strip containing the table of contents of this issue

iii Editorial—Mr Maxwell's contribution to operations research

H. Arsham and **D. Dianich** 299 Consumer buying behavior and optimal advertising strategy: the quadratic profit function case

Rudolf Vetschera 311 An interactive outranking system for multi-attribute decision making

Robert A. Russell and **Paul E. Challinor** 323 Effective methods for petroleum tank truck dispatching

Gary R. Reeves, Kenneth D. Lawrence, Sheila M. Lawrence and **Juan J. Gonzalez** 333 A multiple criteria approach to aggregate industrial capacity expansion

Jeffrey L. Ringuest 341 Substitute derivatives in unconstrained optimization: a comparison of finite difference and response surface approximations

Marvin D. Troutt and **Subhasis Datta** 353 Using nonlinear regression procedures for approximate function optimization

Joseph R. Murray and **W. David Kelton** 357 The transient behavior of the $M/E_k/2$ queue and steady-state simulation

P. C. Kumar 369 A conceptual decision model for impact analysis of industry regulation: a MILP approach

K. Belling-Seib, P. Mevert and **Chr. Müller** 381 Network flow problems with one side constraint: a comparison of three solution methods

NUMBER 5

i Softstrip® data strip containing the table of contents of this issue

Hideaki Yamashita and Shigemichi Suzuki 395 An approximation method for line production rate of a serial production line with a common buffer

Huan Neng Chiu and Tsong Ming Lin 403 An optimal lot-sizing model for multi-stage series/assembly systems

J. J. Júdice and A. M. Faustino 417 An experimental investigation of enumerative methods for the linear complementarity problem

Robert L. Nydick Jr and Howard J. Weiss 427 A computational evaluation of optimal solution value estimation procedures

Ho Woo Lee 441 M/G/1 queue with exceptional first vacation

Rowena Añonuevo and Barry L. Nelson 447 Automated estimation and variance reduction via control variates for infinite-horizon simulations

Mohamed S. A. Osman, Aly K. El-Ariny and Talaat H. M. Refaat 457 An algorithm for decomposition coordination of large scale convex programming problems

R. S. Chang and R. C. T. Lee 471 On a scheduling problem where a job can be executed only by a limited number of processors

Serge Garceau, Muhittin Oral and R. Joel Rahn 479 The influence of data-presentation mode on strategic decision-making performance

NUMBER 6

I Softstrip® data strip containing the table of contents of this issue

Niv Ahituv, Yoav Benjamini and Magid Igbaria 489 A compumetrical approach for analysis and clustering of computer system performance variables

Timothy L. Jacobs, Jeff R. Wright and Arthur E. Cobbs 497 Optimal inter-process steel production scheduling

Vernon Rego 509 Some explicit formulas for mixed exponential service systems

Bernhard Fleischmann and Jannis N. Paraschis 521 Solving a large scale districting problem: a case report

Steven R. Irvine and Reuven R. Levary 535 A discrete-event simulation of the McDonnell Douglas Health Information Systems on-line Executive

Gary R. Reeves, Kenneth D. Lawrence, Sheila M. Lawrence and John B. Guerard Jr	551	Combining earnings forecasts using multiple objective linear programming
R. Cerulli and M. Gaudioso	561	Mean-variance approach to the management of cyclic deliveries
Ming S. Hung and James J. Divoky	567	A computational study of efficient shortest path algorithms
Yaxiong Lin and Yongchang Zhao	577	A new algorithm for the directed Chinese Postman Problem
C. S. Sung and J. H. Byun	585	Technical note on a parallel-facilities production planning model with capacity constraints